REMARKS

In view of the Examiner's comments:

a. FIGURES 1-4 of the Drawings have been amended to include the legend -- PRIOR ART ;

b. The Specification has been amended at Page 7 to correct a typographical error;

c. Claims 6-7 and 10-19 have been canceled;

d. Claims 1-5 and 8-9 have been amended to more particularly define Applicant's invention and to more clearly distinguish it from the cited references; and

e. Claims 20-22 have been added.

As Applicant's Specification sets out beginning at Page 11, the present invention is directed to an exhaust system of an automotive vehicle in which the conventionally employed muffler is eliminated. In particular, testing showed that as the engine built rpm, the gas flow into the chambers of a muffler created a turbulence in pressure which made it harder for the exhaust gases to come out of the engine. Increased gas mileage, increased horsepower and torque, lower engine temperatures are all achievable with the invention, however, by eliminating the muffler and redesigning the flow directing pipe segments to themselves serve as the "muffler" for the exhaust. That is, even though the teachings of Applicant's Patent No. 5,144,799 and/or Patent No. 5,199,258 be followed, without the present invention, the existence of a muffler itself still gives rise to a problem. Noting that the cited Bainbridge reference continues to show and utilize a muffler in the exhaust path (22), the redesign of the present Application eliminates the muffler entirely by providing a series of apertures along the lengths of header pipe segments, and/or along the lengths of exhaust pipe segments -- and, then by enclosing the individually apertured pipe segments within a surrounding segmented pipe or shield. As the Specification makes clear at Page 12, "pipe segments within pipe segments" result when the surrounding shield is similarly cut and angled so as to enclose the individual header and/or exhaust pipe segments.

As the Specification sets out at Page 13, the "pipe-within-a-pipe" construction could be utilized either for just the exhaust pipe segments of the automotive vehicle, for just the header pipe

segments from the engine to the input end of the collector pipe, or for both (which provides the optimum performance).

Claims 1-5 and 8-9 have been amended to more clearly define this construction of the invention, with the surrounded segments of at least one of the exhaust pipe and each of the header pipes having the spaced apertures along their respective lengths. Newly added Claim 20 goes further in reciting the apertured lengths being within both of the exhaust pipe and header pipe segments. Newly added Claims 21 and 22 further modify these apertures as being spaced apart from one another both horizontally and vertically -- for example, as shown in FIGURE 5 of the Drawings. Claim 8 calls out a further steel wool wrapping around individual ones of the surrounded pipe segments, while Claim 9 calls out a steel wool wrapping being around each of the surrounded pipe segments.

It is respectfully submitted that neither of Applicant's above noted Patents suggest the "back pressure" problems associated with the muffler of an automotive vehicle, nor does the cited Bainbridge Patent -- which continues to utilize a muffler in its exhaust system. With Applicant's invention as now defined, the output of the collector pipe connects directly into the exhaust pipe segments without any intervening muffler, and with the surround pipe being composed of like segments of preselected length cut at their ends at preselected angles for traversing the component parts of the vehicle without any bending as would create turbulence or back pressure.

This Application is now considered to be in condition for allowance. Allowance of Claims 1-5, 8-9 and 20-22 is respectfully submitted.

Respectfully submitted,

RANDOLPH S. BARTH

By: _____

CHARLES I. BRODSKY
Patent Attorney
Registration No. 22,058

CIB:sfw
(732) 431-1333
Nov 29, 2005